

AMENDMENTS TO THE CLAIMS

What is claimed is:

1. (Currently amended) A In a system that does not rely on illuminating a target, a surveillance method for passively detecting from its spectral signature the identity of a received signal from an unilluminated source that is transmitting the signal, comprising the steps of:

deploying a battery-powered unit having a spectrum analyzer that outputs a series of spectral lines, the position and amplitude of which characterize the identity of a received signal from ~~a~~ an unilluminated signal source, the battery-powered unit having a signal source recognition unit coupled to the spectrum analyzer for analyzing the frequency spectral content of the received signal to ascertain the identity of the signal source, and a transmitter for transmitting the results of the signal source recognition unit to a remote location; and,

receiving the transmittal signal at the remote location and providing an indication of the presence and identity of ~~a~~ the unilluminated signal source.

2. (Original) The method of Claim 1, and further including in the deployed unit a direction finding system for ascertaining the direction of an incoming signal from the signal source and for transmitting the direction of the incoming signal to the remote location.

3. (Original) The method of Claim 1, and further including in the deployed unit a geophysical location detection system for determining the location of the deployed unit and for transmitting the determined location to the remote location, with transmissions from a number of deployed units permitting determination of the location of the signal source the signal of which is recognized by the signal source recognition unit.

4. (Original) The method of Claim 1, and further including in the deployed unit a direction finding system for ascertaining the direction of an incoming signal and a geophysical location detection system for ascertaining the location of the deployed unit, and,

coupling the outputs of the direction finding system and the geographical location detection system to the transmitter, whereby with reports from a number of deployed units the location of the source of the incoming signal can be ascertained by triangulation.

5. (Original) The method of Claim 1, wherein the spectrum analyzer includes a single dual chirp generator and both a first dispersive delay line and a second dispersive delay line, with the two different chirps from the dual chirp generator matched to the respective delay lines, whereby power consumption is limited through the use of a single chirp generator thus to maximize the longevity of the battery powered unit deployed.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)